

FIG. 1

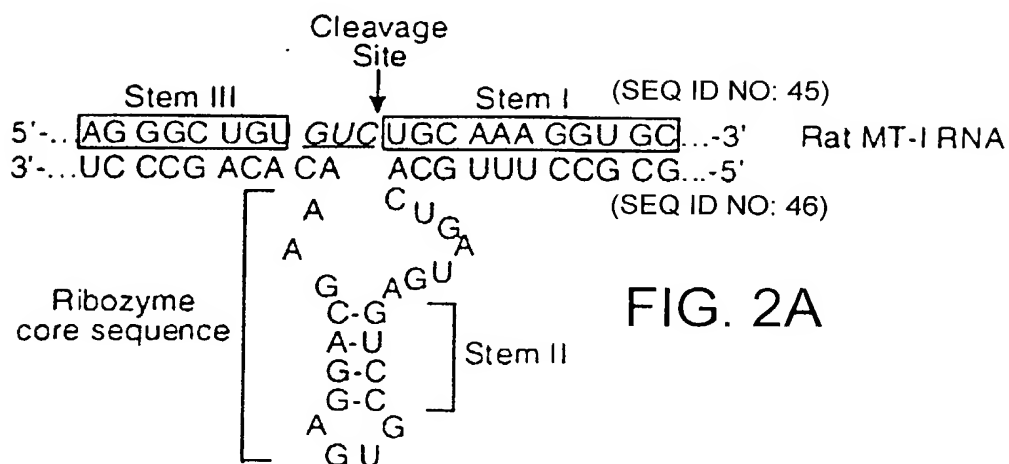


FIG. 2A

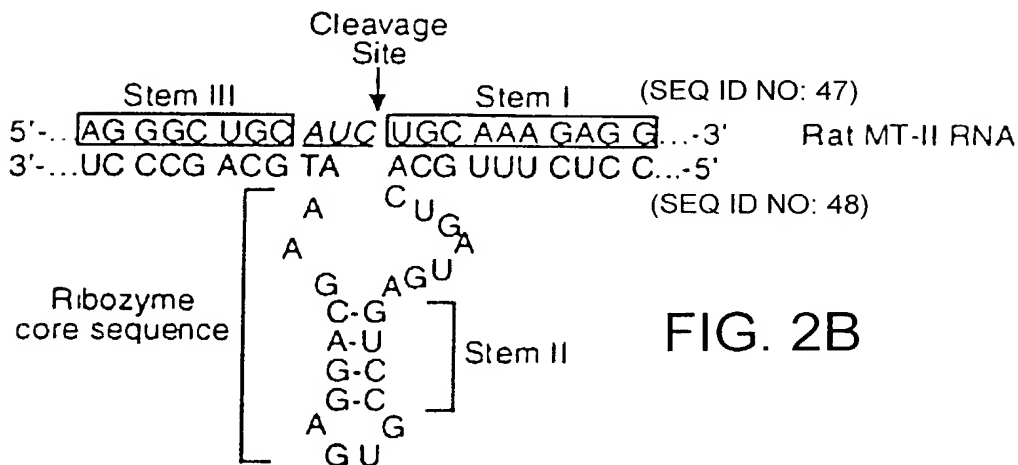


FIG. 2B



Sequence Comparison between Rodent and Human MT Messages on the Regions Recognized by Ribozymes
(MT-I Rz, upper; MT-II Rz, lower) and Their Cleavage Triplets

Gene	Accession No. (NCBI GenBank)	AGGGCTGT Stem III -nt. 137-144 (8 nt)	GTC Cleavage triplet -nt. 145-147	TGCAAAGGCGC Stem I -nt. 148-158 (11 nt)	Expected effectiveness
MT-I Rz (Rz1-2)					
Mouse MT-I	S62785	PM	PM	PM	+
Rat MT-I	M11794	PM	PM	C → T (nt. 156)	+
Human MT-Ib	M13485	PM	PM	G → T (nt. 157)	+
Human MT-Ic	M10942	T → C (nt. 144)*	PM	C → G (nt. 156)	-
Human MT-II'	M10943	PM	C → T (nt. 147)*	C → G (nt. 156)	-
Human MT-Ir	X97261	T → C (nt. 144)*	PM	C → G (nt. 156)	-
MT-II Rz (Rz4-9)					
Mouse MT-II	K02236	PM	PM	PM	+
Rat MT-II	M11794	PM	PM	PM	+
Human MT-II	M26637	PM	PM	A → G (nt. 155)	+
Human MT-Ia	K01383	PM	C → G (nt. 147)*	A → G (nt. 155)	-
Human MT-Ie	M10942	PM	A → G (nt. 145)*	A → G (nt. 155)	-
Human MT-Ig	J03910	G → A (nt. 138)	PM	A → G (nt. 155)	+
Human MT-Ih	X64834	PM	PM	A → G (nt. 155)	+
Human MT-II	X76717	PM	PM	A → G (nt. 155)	+
Human MT-Ir	X97261	PM	A → G (nt. 145)*	A → G (nt. 155)	-
Human MT-Ix	X65607	PM	PM	A → G (nt. 155)	+

FIG. 3

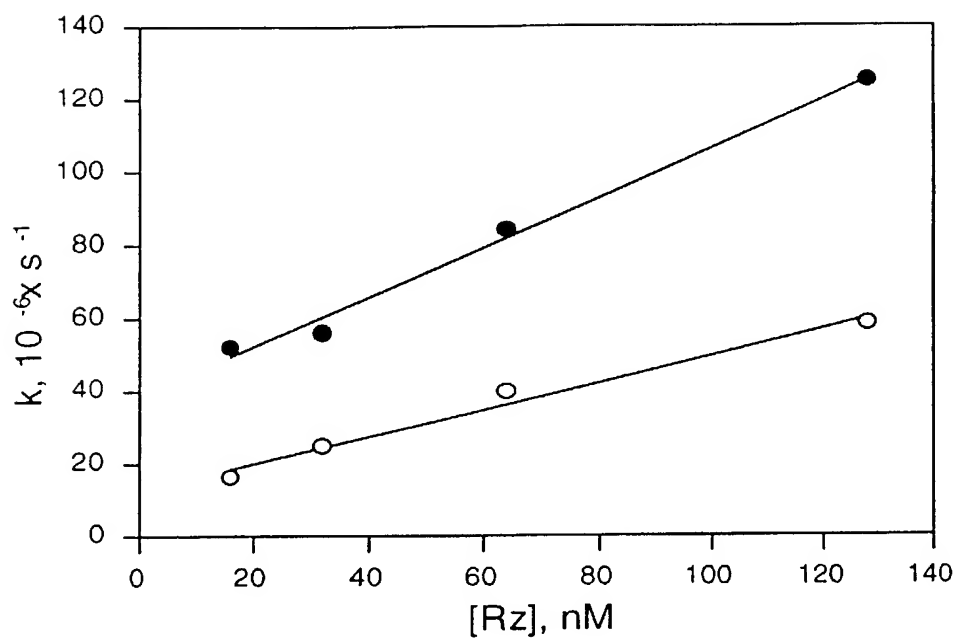


FIG. 4

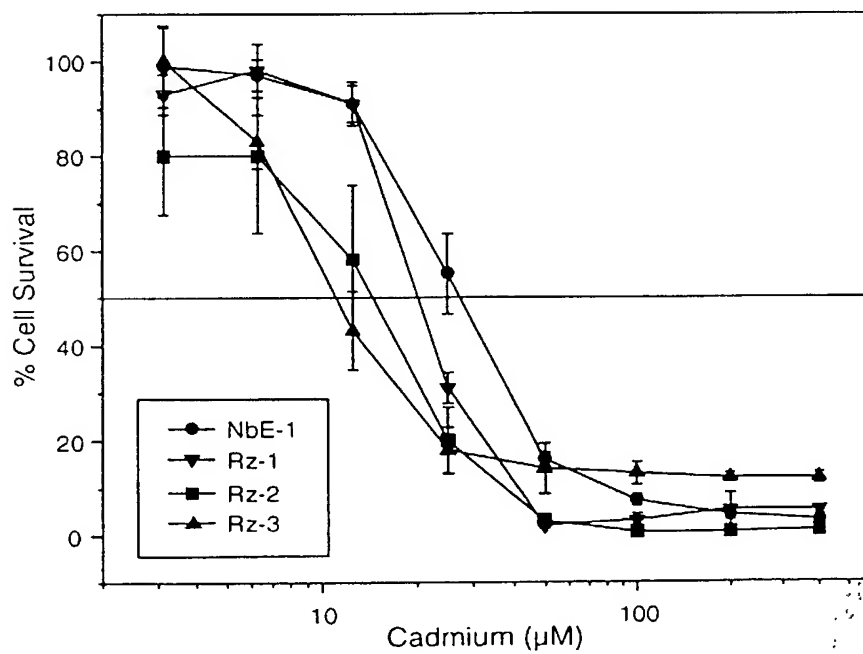


FIG. 5

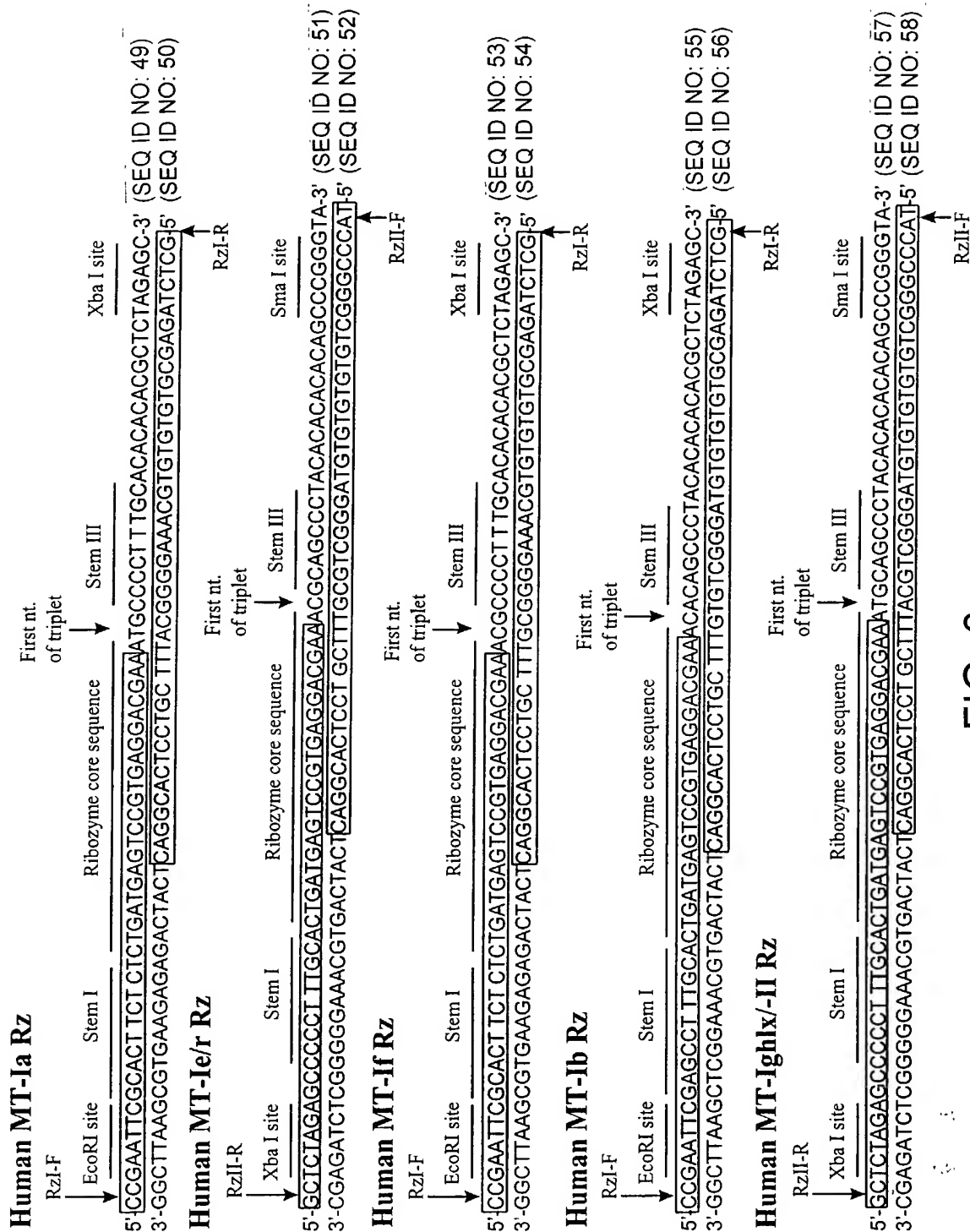


FIG. 6

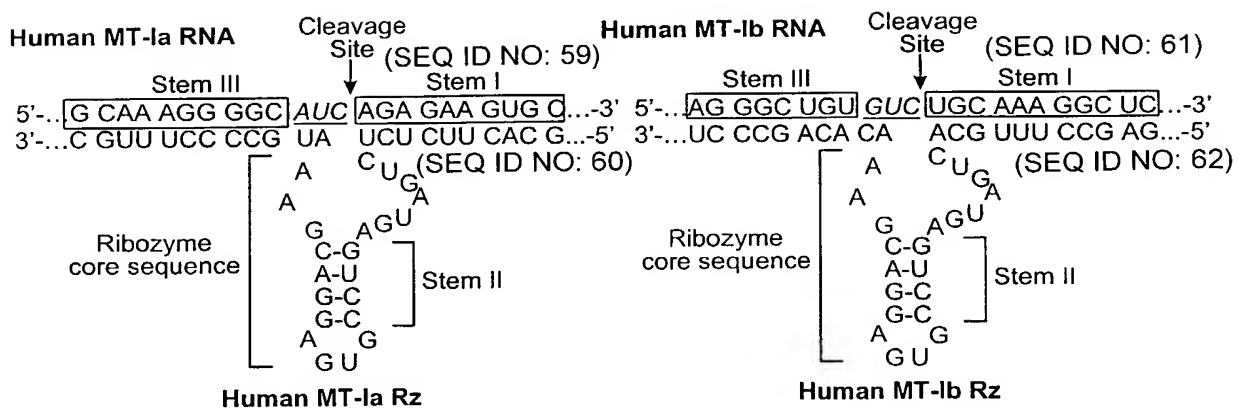


FIG. 7A

FIG. 7B

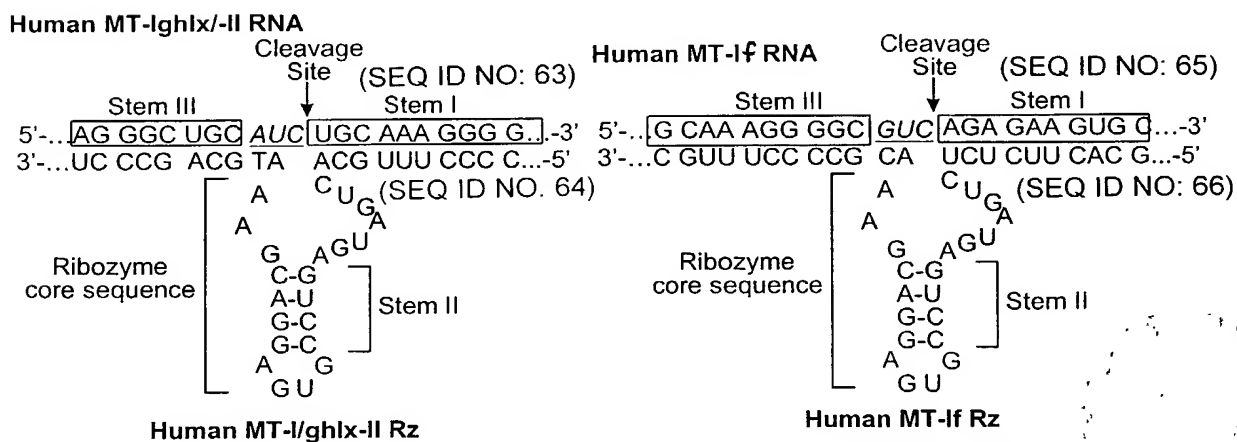


FIG. 7C

FIG. 7D

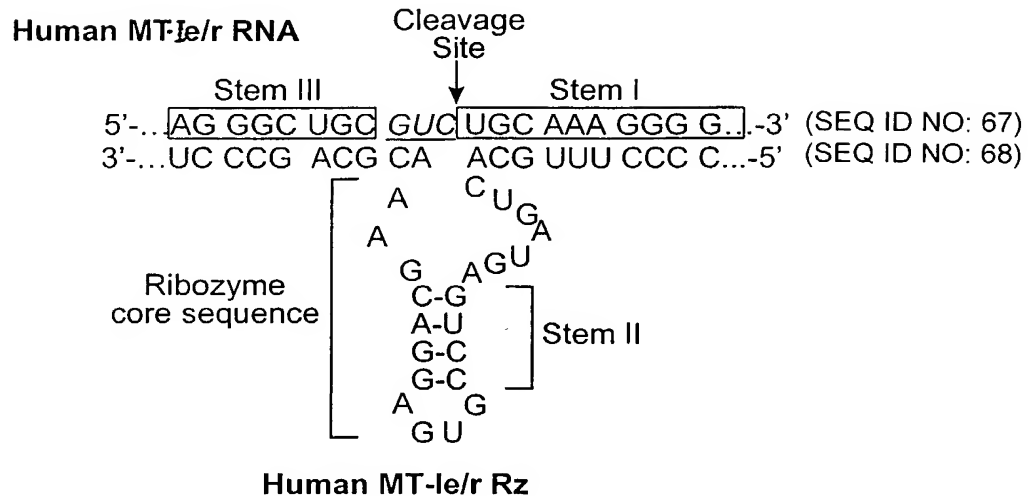


FIG. 7E

CELL NUMBER $\times 10^4$

70
60
50
40
30
20
10
0

VECTOR 0.5uG 1uG 2uG MUTANT

*=p<0.005

Treatment	Cell Number ($\times 10^4$)
VECTOR	~52
0.5uG	~44
1uG	~40
2uG	~18*
MUTANT	~62

FIG. 9A

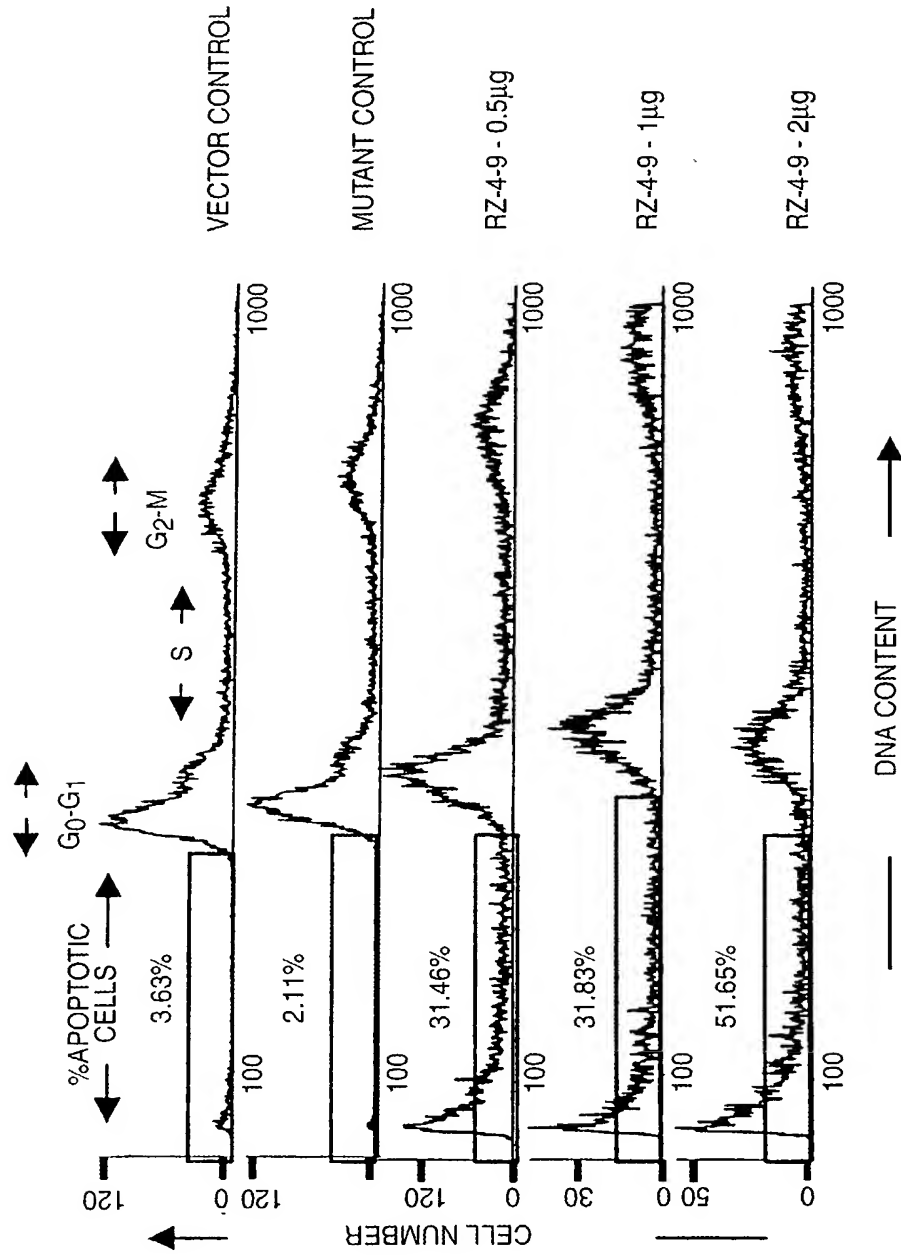


FIG. 8B

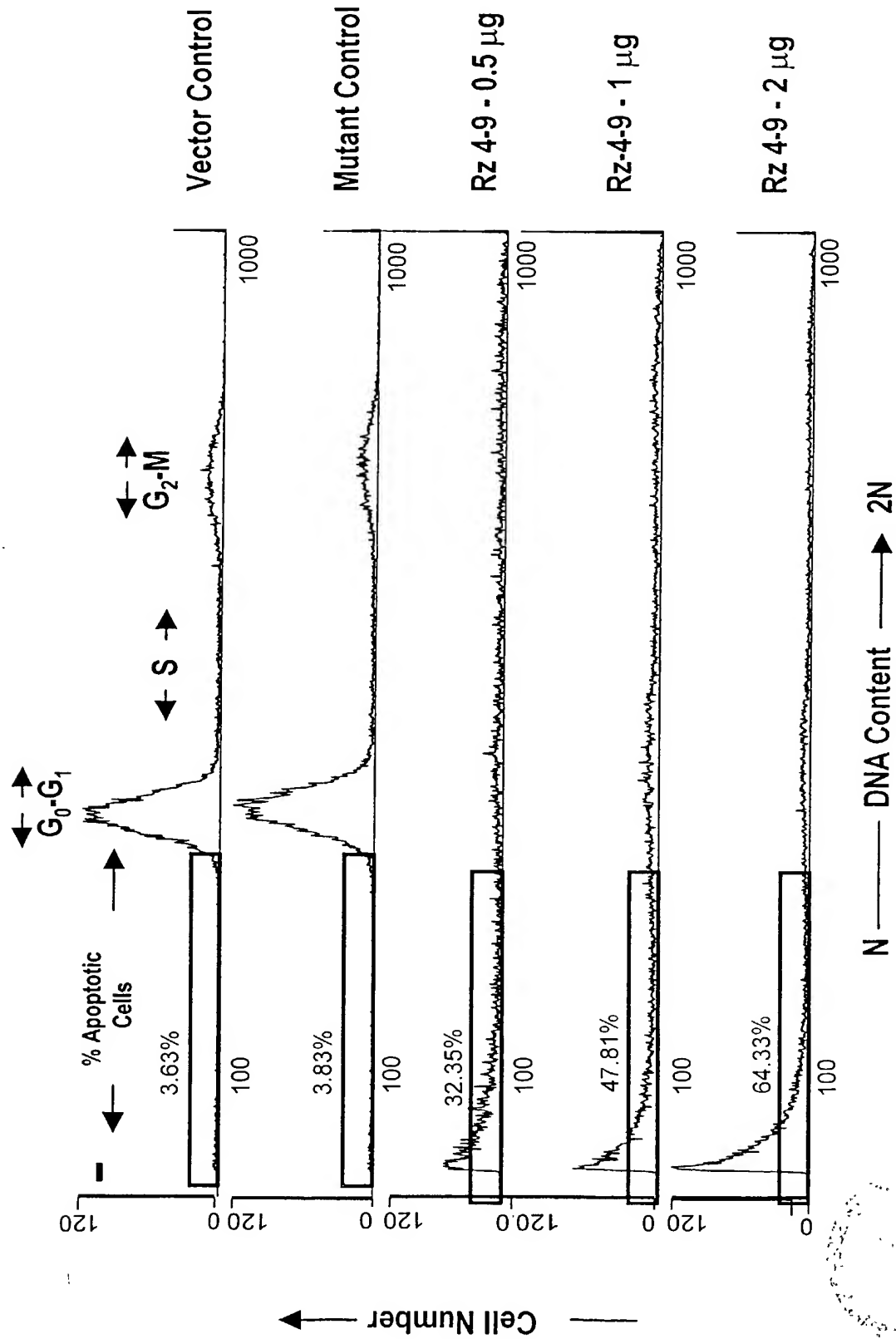


FIG. 9B

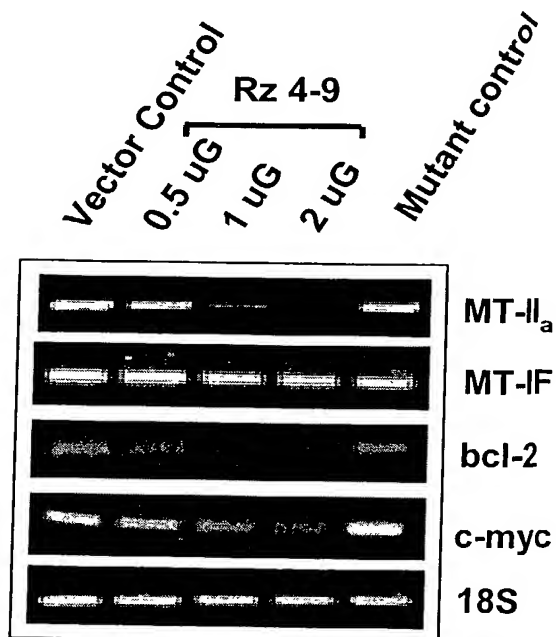


FIG. 10A

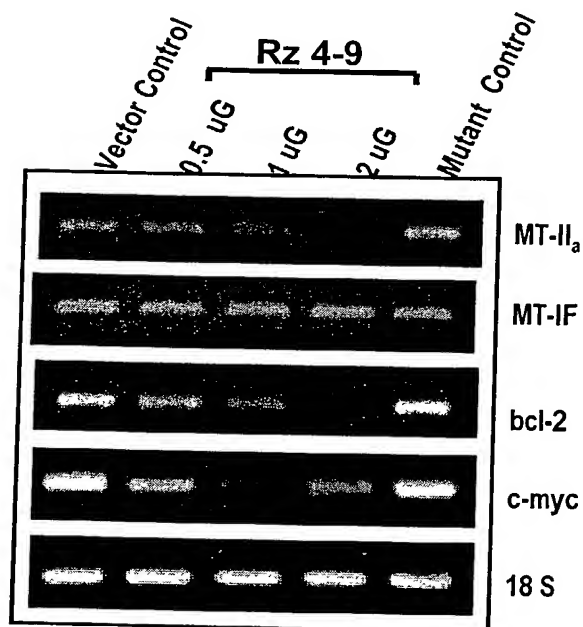


FIG. 11A

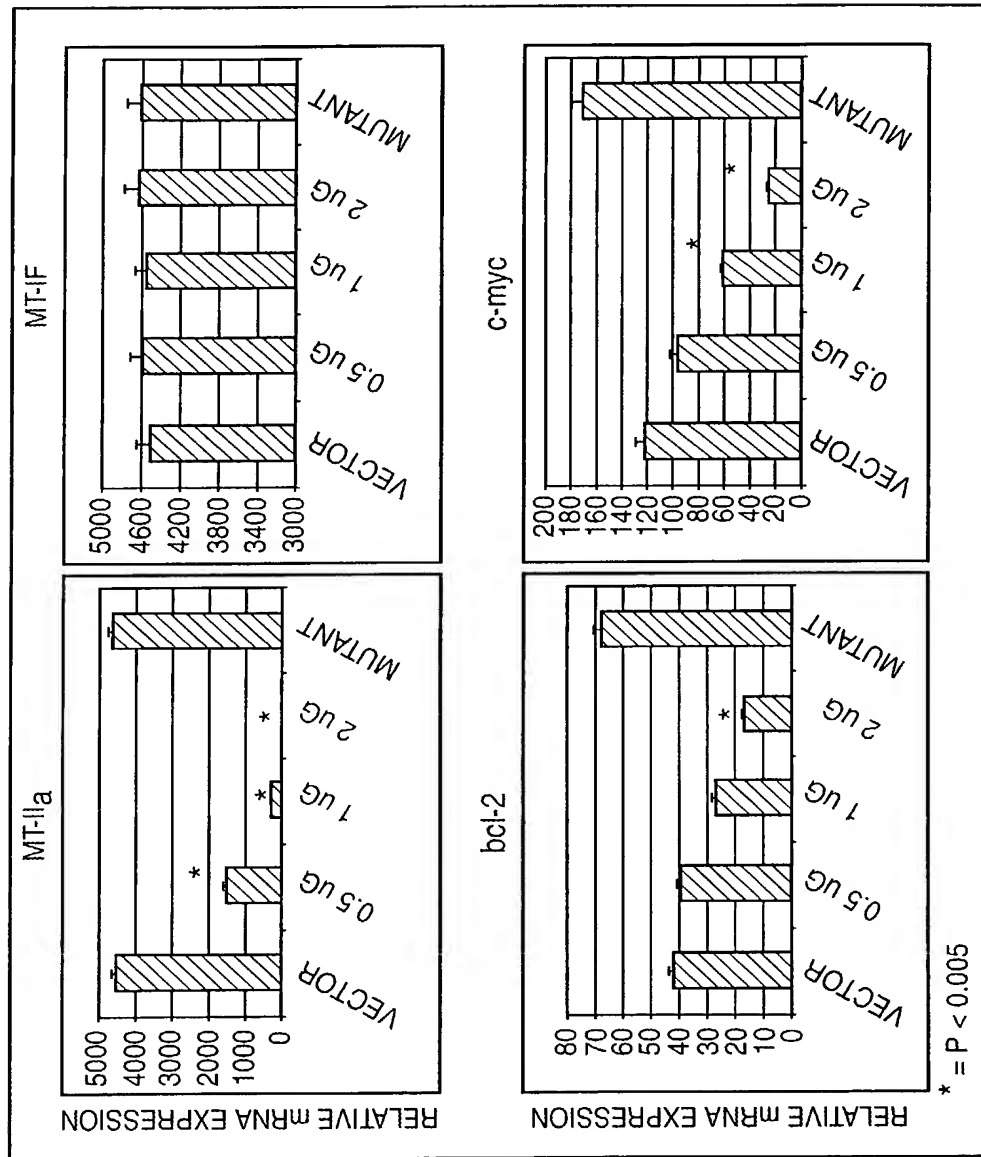


FIG. 10B



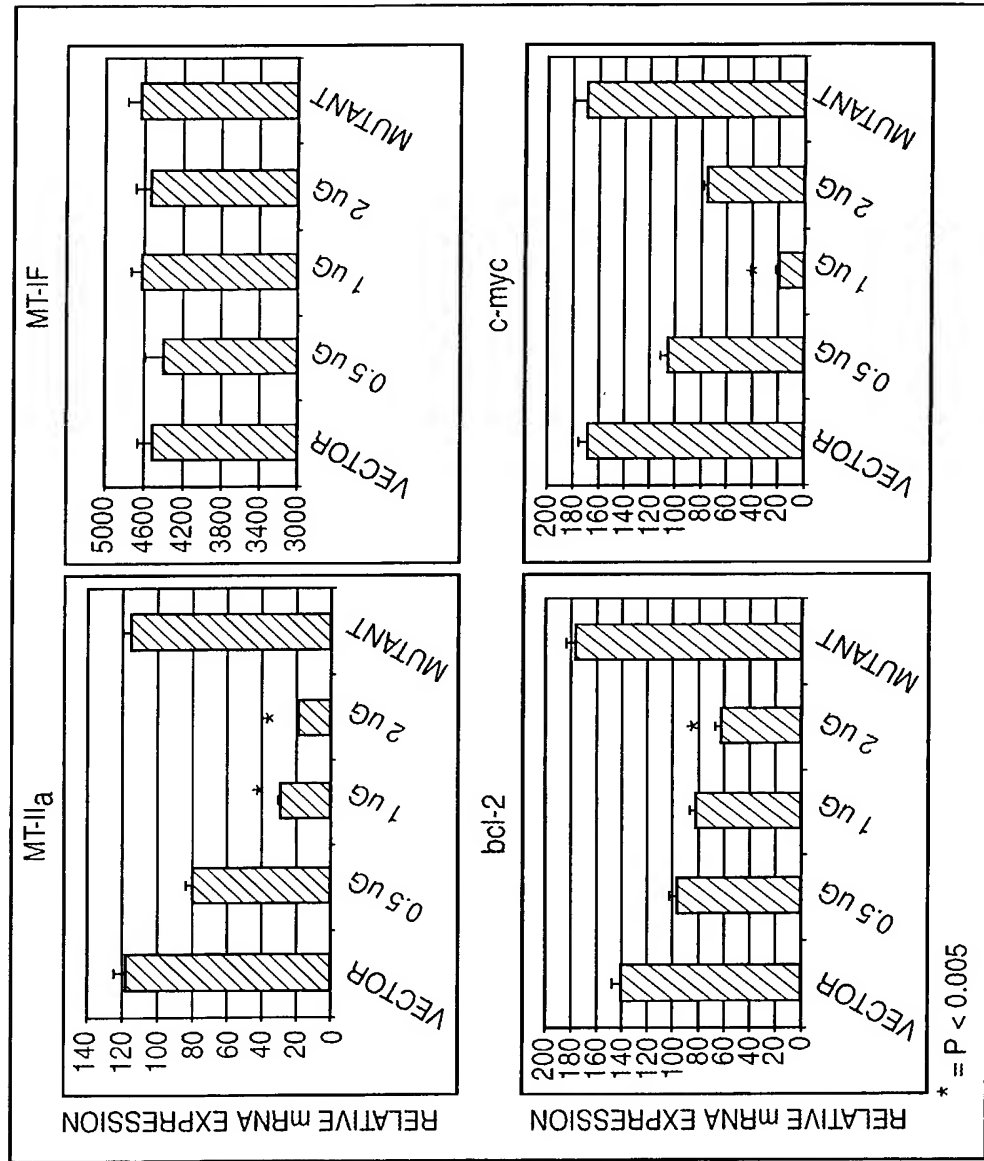


FIG. 11B



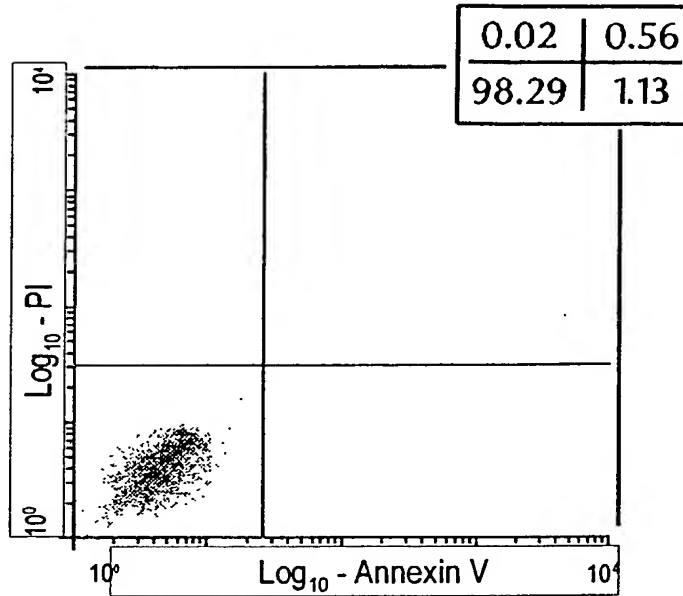


FIG. 12A

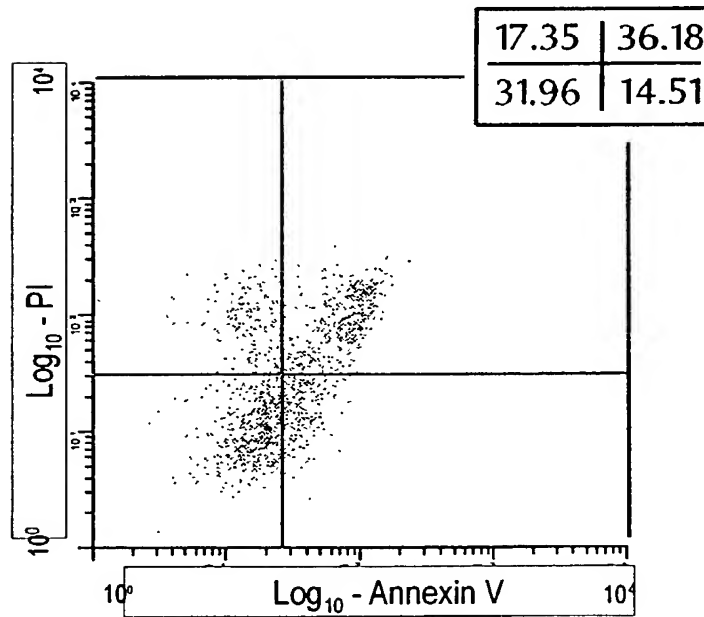


FIG. 12B



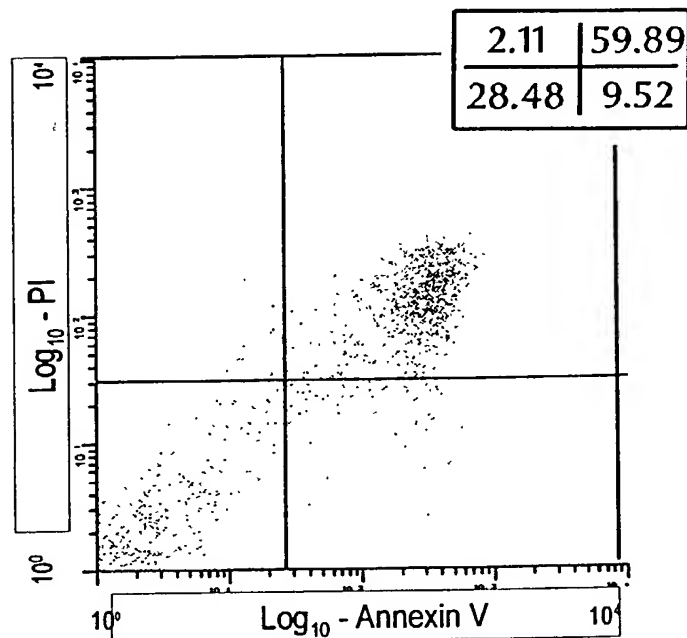


FIG. 12C

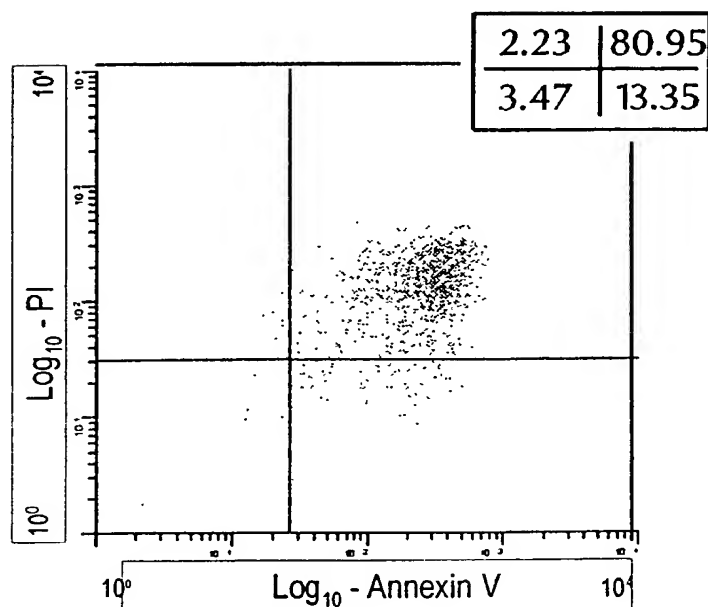


FIG. 12D



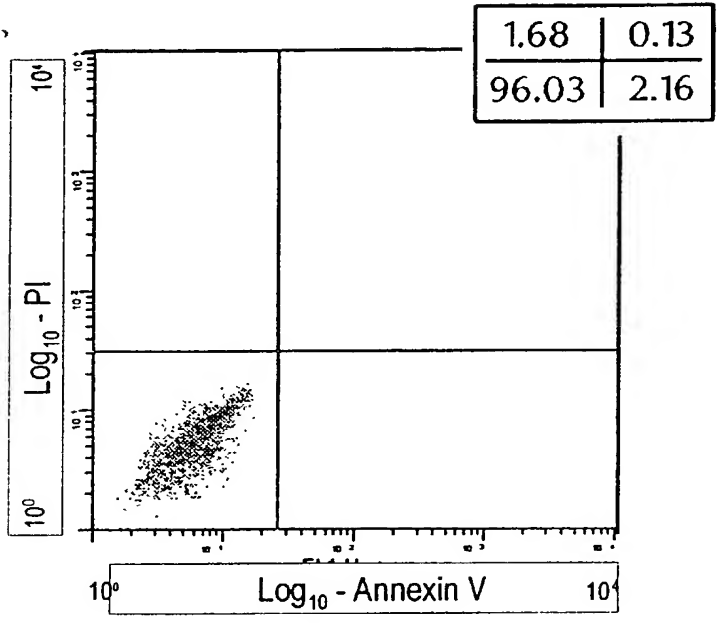


FIG. 12E

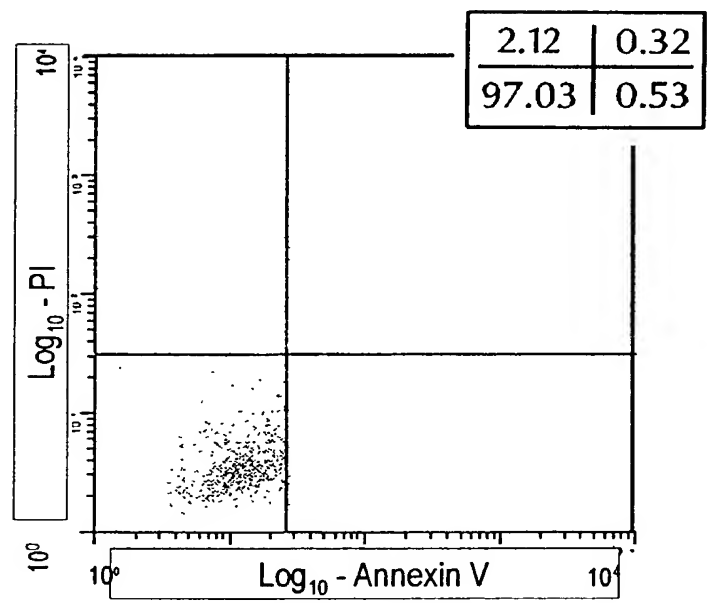


FIG. 13A



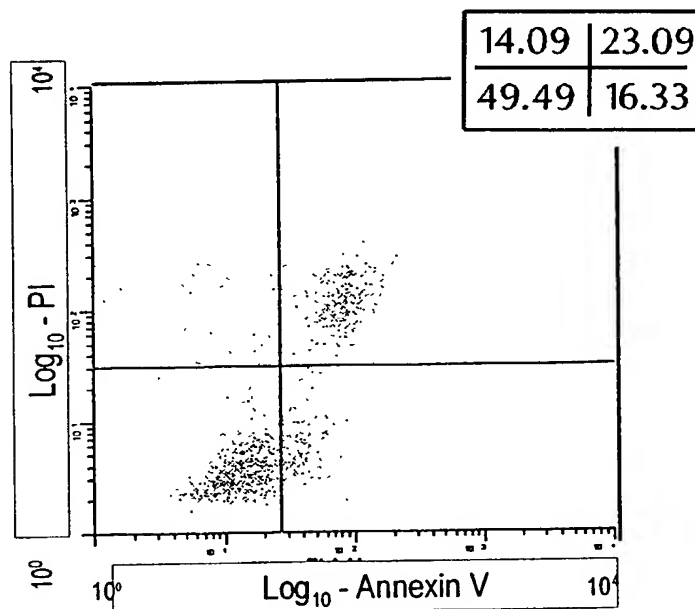


FIG. 13B

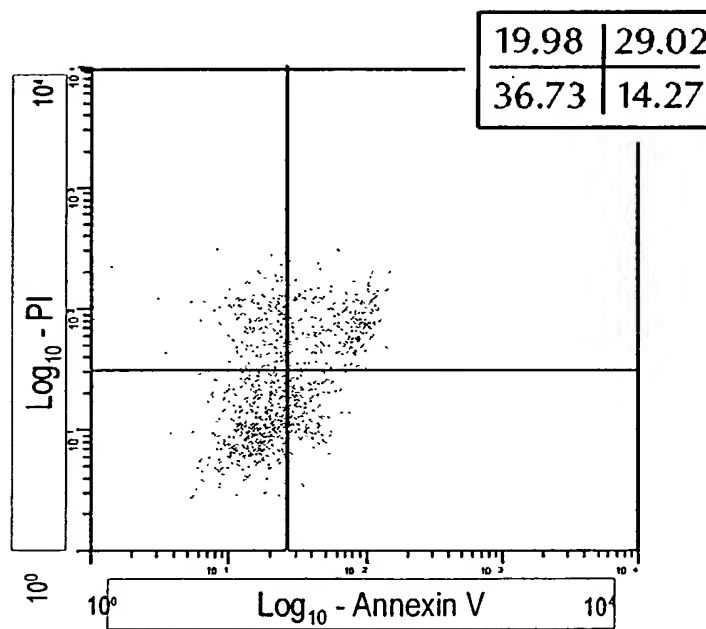


FIG. 13C



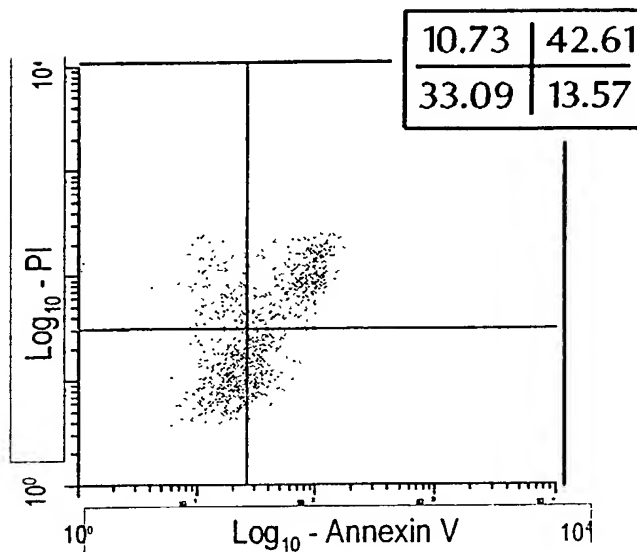


FIG. 13D

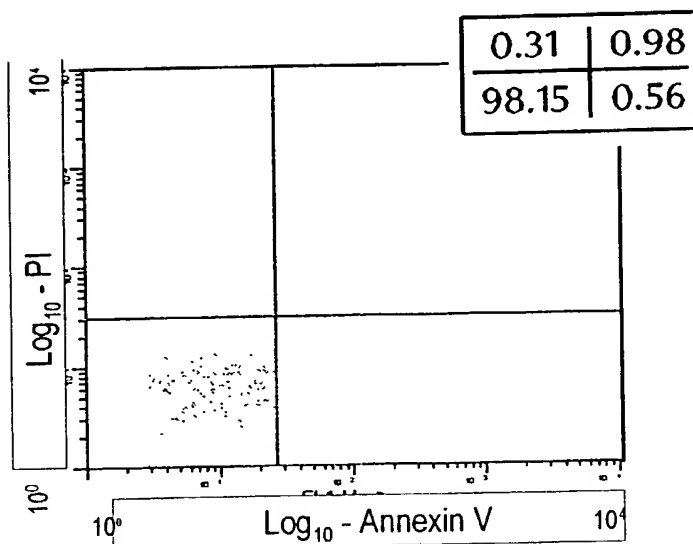


FIG. 13E



Human MT-1a Rz:
Forward Primer: 5'-CCG AAT TCG CAC TTC TCT CTG ATG AGT CCG TGA GGA CGA A-3' (SEQ ID NO: 27)
Reverse Primer: 5'-GCT CTA GAG CGT GTG TGT GCA AAG GGG CAT TTC GTC CTC ACG GAC-3' (SEQ ID NO: 28)

Human MT-1f Rz:
Forward Primer: 5'-CCG AAT TCG CAC TTC TCT CTG ATG AGT CCG TGA GGA CGA A-3' (SEQ ID NO: 29)
Reverse Primer: 5'-GCT CTA GAG CGT GTG TGT GCA AAG GGG CGT TTC GTC CTC ACG GAC-3' (SEQ ID NO: 30)

Human MT-1e/r Rz:
Forward Primer: 5'-TAC CCG GGC TGT GTG TGT GTA GGG CTG CGT TTC GTC TCA CGG AC-3' (SEQ ID NO: 31)
Reverse Primer: 5'-GCT CTA GAG CCC CCT TTG CAC TGA TGA GTC CGT GAG GAC GAA-3' (SEQ ID NO: 32)

Human MT-1ghixl-III Rz:
Forward Primer: 5'-GCT CTA GAG CCC CCT TTG CAC TGA TGA GTC CGT GAG GAC GAA-3' (SEQ ID NO: 33)
Reverse Primer: 5'-TAC CCG GGC TGT GTG TGT GTA GGG CTG CAT TTC GTC CTC ACG GAC-3' (SEQ ID NO: 34)

Human MT-1b Rz:
Forward Primer: 5'-CCG AAT TCG AGC CTT TGC ACT GAT GAG TCC GTG AGG ACG AA-3' (SEQ ID NO: 35)
Reverse Primer: 5'-GCT CTA GAG CGT GTG TGT GTA GGG CTG TGT TTC GTC CTC ACG GAC-3' (SEQ ID NO: 36)

FIG. 14

